

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (original): A multi-channel detector readout apparatus, comprising:
  - (a) means for selecting a channel for output from a plurality of detector input channels carrying corresponding input signals having amplitudes, wherein said selected channel comprises the detector input channel having a signal amplitude exceeding a threshold level and further exceeding the amplitude of the signals on the remaining input channels during a sample period; and
  - (b) a circuit providing said means for selecting said channel.

Claims 2-34 (canceled)